EXECUTIVE SUMMARY

Introduction

This plan has been prepared in accordance with the *Interagency Policy Guidance and Direction: Wildland Fire Rehabilitation and Restoration (1998) signed by the Assistant Secretary of the Interior, Policy, Management and Budget and Under Secretary of Agriculture, NRE.* This plan provides emergency fire rehabilitation recommendations for all lands burned within the 24 Command Fire including: public lands administered by the US Fish & Wildlife Service (USFWS), Department of Energy (DOE), Bureau of Land Management (BLM), State, and private lands of individual ownerships. The primary objectives of the 24 Command Fire Burned Area Emergency Rehabilitation (BAER) Plan are:

- To prescribe post-fire mitigation measures necessary to protect human life, property, and critical cultural and natural resources.

- To promptly mitigate the unacceptable effects of fire and its suppression on lands within and adjacent to the burned area in accordance with management policies, and all relevant federal, state, and local laws and regulations.

This plan addresses emergency rehabilitation of fire suppression impacts and fire effects. The BAER Team conducted an analysis of fire effects throughout the lands impacted by the fire. The watershed group assessed the overall watershed changes from the fire and developed a burn severity map. Archeologists inventoried suppression impacts for potential damage to cultural sites as well as initiating a cultural resource damage assessment. The vegetation specialist evaluated and assessed fire effects and suppression impacts to vegetative resources, including threatened and endangered (T&E) species, and identified values at risk associated with vegetative losses. The wildlife biologist conducted an assessment of T&E species and initiated and closed Section 7 consultation with US Fish & Wildlife Service. The GIS specialists gathered the data layers necessary for the plan, coordinated GPS activities, and transmitted the data to DOE and USFWS. The operations specialists inventoried fire suppression impacts, developed specifications for their rehabilitation and initiated repair of fence cuts.

Resource assessments produced by these specialists are in Appendix I and the treatments identified in the assessments under management/monitoring recommendations can be found in Part F. A summary of the costs by jurisdictions is in Part E. Appendix II contains the National Environmental Policy Act (NEPA) compliance documentation summary. Appendix III contains the BAER Plan maps. Appendix IV contains photo documentation and Appendix V the supporting documentation.

Arid Lands Ecology Refuge/Hanford Reach National Monument Management

In 1967, the US Atomic Energy Commission established the Arid Lands Ecology Reserve (ALE) by administrative order to preserve “portions of vegetation types that once covered a great expanse of the West.” In recognition of its ecological value, the ALE Reserve was designated as the Rattlesnake Hills Research Natural Area (RNA) in 1971 by a cooperative agreement between federal land management agencies. An RNA is a physical or biological land unit in which natural processes and features are preserved to the extent possible for research and education. The ALE Reserve is the largest RNA in the State of Washington. In 1975, the ALE Reserve was designated as a National Environmental Research Park (NERP) by the Energy Research and Development Administration. There are seven NERPs throughout the nation, all with the purpose of providing opportunities for ecological research and environmental study.

The ALE Reserve is owned by the US Department of Energy-Richland and was established as a safety and security buffer for the Hanford Site. Public access to these areas has been and continues to be restricted. The ALE Reserve represents one of the largest and highest quality parcels of shrub-steppe habitat remaining in Washington State and provides habitat for a number of rare plant and wildlife species, as well as the Rattlesnake Hills Elk Herd. Because of its size and history of protection, the ALE Reserve retains much of its native biological diversity and supports natural landscape processes that are absent or

degraded elsewhere in the region. In addition, the site has been the focus of nearly 30 years of ecological studies and consequently has a large database of information on climate, soils, wildlife, vegetation, and ecosystem functions and processes.

As a result, the draft Comprehensive Conservation Plan for the ALE Reserve identifies its goals as:

- Protect and restore the native habitats and biodiversity of the Hanford shrub-steppe ecosystem.
- Monitor, protect, and recover native plants and animals that are federally or state listed and any other species that are in any other way considered sensitive.
- Monitor status and trends of migratory birds, particularly those that are considered shrub-steppe obligate species and manage local populations.
- Provide for compatible education, interpretation, and wildlife-dependent recreational opportunities.
- Promote public understanding of the shrub-steppe ecosystem through scientific research and allow other compatible research opportunities afforded by the unique and isolated environment of the ALE Reserve.
- Manage for the protection, preservation, evaluation, and understanding of the cultural heritage and resources of the ALE Reserve while consulting with appropriate Native American groups and complying with historic preservation legislation.
- Provide for operation and maintenance activities without compromising ecological and cultural values.

At more than 360,000 acres, the Hanford Site is one of the largest contiguous pieces of shrub-steppe habitat remaining in the Columbia Basin. The uniqueness and biological diversity of the area was formally recognized by Presidential Proclamation 7319 of June 9, 2000 establishing this area as the Hanford Reach National Monument. The monument is described as a “biological treasure, embracing important riparian, aquatic, and upland shrub-steppe habitats that are rare or in decline in other areas. Within its mosaic of habitats, the monument supports a wealth of increasingly uncommon native plant and animal species, the size and diversity of which is unmatched in the Columbia Basin.” Because of the high diversity of native plant and animal species, the large number of rare and sensitive plant species, the well developed microbiotic crusts and significant breeding populations of nearly all steppe and shrub-steppe dependent species, the USFWS has been tasked to preserve and protect these objects of antiquity in perpetuity.

Department of Energy - Hanford Site Management

The Hanford Site was established by the US Government in 1943 as a national security area for the production of weapons-grade plutonium and purification facilities. For more than 40 years, the primary mission at Hanford was associated with the production of nuclear materials for national defense. However, large tracts of land were used as protective buffer zones for safety and security purposes and remained undisturbed. These buffer zones preserved a biological and cultural resource setting unique in the Columbia Basin region.

In the late 1980s, the primary DOE mission changed from defense materials production to environmental restoration. The Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement was completed in September, 1999. Included in the assumptions for the preferred alternative are:

- DOE, as a Federal agency, has a Trust responsibility to protect Tribal interests.

- The public will continue to support protection of cultural and natural resources on the Site, especially on the Wahluke Slope, the Columbia River Corridor, the McGee Ranch, and the ALE Reserve.

Other Lands

Grazing, agriculture and scenic lands on private, state, and county ownership were also impacted by the fire. The primary concern for these land ownerships is rehabilitation of suppression impacts.

Fire Background

The 24 Command Fire (also known as the Two Forks Fire and the SR 24 MP 36 Fire) began at about 1330 hours on Tuesday, June 27, 2000, as the result of a fatal motor vehicle accident on State Route (SR) 24, about 2 miles west of the intersection with SR 240. The lands in the vicinity are managed as the Arid Lands Ecology Reserve (ALE) and the Hanford Reach National Monument by the US Fish and Wildlife Service, under permit from the US Department of Energy. Driven by high winds and temperatures and low humidity, the fire quickly spread over the next two days and consumed 163,884 acres of Federal, state, and private lands. The fire also burned 11 residences and a number of other structures in and around Benton City. Burned acreage included: US Fish and Wildlife Service - 78,732 acres; Department of Energy-Hanford Site - 60,254 acres; private lands - 20,225 acres; State - 3,633 acres; Bureau of Land Management - 980 acres; and McGee Ranch and Riverlands

A Type III Incident Management Team (IMT) was assigned to the fire on June 27 at 1800 hours. A Type II IMT was requested on June 28 at 0400 hours and a Type I IMT was requested at 2300 hours. A Unified Command took charge consisting of the Type I and II teams and local Fire Chiefs. The fire was contained on July 1 and controlled on July 2, 2000.

The US Fish and Wildlife Service and the Department of Energy each requested a Burned Area Emergency Rehabilitation (BAER) Team. The Department of the Interior BAER Team, Northern States (Gasser) responded. The BAER Team arrived on June 30 and began field reconnaissance. Upon arrival at the 24 Command Fire, the BAER Team was requested to prepare a BAER plan to address potential effects of the fire and fire suppression impacts to all jurisdictions affected by the fire. There were 18 people on the BAER Team with an additional six Resource Advisors to assist in the field assessment. In addition, a number of resource specialists from DOE and their contractors assisted in providing resource information.

On July 3, the helicopter assigned to the BAER Team, while on a reconnaissance flight with team members, spotted a fire near residences in West Richland. The pilot dropped off the BAER Team members and picked up the helitack crew and initial attacked the fire dropping 6 buckets of water. This quick action kept the fire to about one acre in size and protected several residences from burning. On July 5, BAER Team members inventorying suppression impacts in Snively Canyon initial attacked a flare-up preventing further damage to riparian vegetation.

On July 7, the BAER Team conducted an agency debriefing in Richland, Washington, providing preliminary findings and identifying proposed treatments. An agenda for the meeting can be found in Appendix V.

The BAER Team, tasked with evaluation of short and long-term rehabilitation needs, developed this plan to address the following issues:

- Facilities or improvements impacted by the fire or the suppression of the fire.
- Cultural and natural resource values impacted by the fire or fire suppression actions.

- Rehabilitation requirements established by Federal law, policies, and relevant Department of the Interior resource management mandates.
- Rehabilitation requirements established by state laws, policies, and regulations.
- Implementation of treatments in a timely manner, prior to the first damaging rains.

Resource Damages and Threats to Human Safety and Resources

The 24 Command Fire burned 163,884 acres, on public and private lands within a perimeter of 255 square miles. Fire suppression impacts included: approximately 41 miles of dozer line, dirt roads graded wider, fence cuts, retardant drops on LIGO Tunnel and springs, 1 burned-over engine, and a backfire of 9,698 acres.

The entire fire has been mapped by the BAER Team for burn severity. One hundred per cent of the fire area is classified as low burn severity or unburned. This attests to the fires' rapid spread through light fuels and low residence time. There were some pockets of higher burn severity where larger sagebrush plants were consumed. Most of the soils examined were not water repellant. Therefore, an overall water yield increase due to the fire is expected to be minor and not exacerbate flooding events.

Almost all plant and litter cover that was present in the burn area have been consumed by the fire. The loss of vegetative cover has exposed fine sandy and silty soils to ablation. Nearly all soils within the burn area have a fairly high risk of wind erosion, however, certain soils within the burn area are especially susceptible. Because of this, there will be a safety concern for drivers traveling on roads in and around the burn area during periods of dust storms crossing roads creating low visibility. While dust storms may create a hazard for drivers, wind erosion is not expected to threaten water quality.

The BAER Team conducted intensive field surveys after the fire to identify impacts and compile the following recommendations for rehabilitation of affected lands:

Fire Suppression Treatments:

- Inventory dozerlines for potential archeological sites prior to rehabilitation
- Rehabilitate 41 miles of dozerline
- Repair any additional cut fences
- Remove burned-over engine when investigation is complete
- Rehabilitate LIGO structure impacted by retardant

Emergency Fire Rehabilitation Treatments:

- Hire BAER Implementation Leader
- Conduct cultural resource damage assessment of known/documented sites
- Protect cultural sites
- Install warning safety signs for dust storms and elk crossings
- Make 3 ground hazards safe (large holes)
- Control unburned non-native invasive plants
- Replace sagebrush plantations as critical habitat for T&E species
- Plant 80,000 sagebrush plants in fall of 2000
- Collect seed from sagebrush, bitterbrush, bunchgrass and greasewood populations
- Monitor vegetative recovery
- Install drift fencing along identified roadways
- Increase law enforcement patrols for safety and resource protection
- Monitor and control invasive plant species
- Monitor fire effects to T&E species
- Inventory mortality and monitor recovery of microbiotic soil crust
- Follow-up consultation/review by BAER Team members
- Conduct public information dissemination

Specifications were developed for all actions meeting the requirements of fire suppression or Emergency Fire Rehabilitation (EFR) funding.

Because of the heightened awareness by the public of fires on Department of Energy lands (here and at Los Alamos) the BAER Team along with the US Fish and Wildlife Service - ALE Reserve, in coordination with DOE, conducted a number of media interviews for radio, television, and newspapers. The primary message was that of public safety regarding dust storms and increased potentials for elk crossing roads. In addition, the results of the BAER Team's assessments were given. To further this information sharing the USFWS and DOE will consider the posting of the BAER Plan on their websites.

In addition to conducting and developing the above assessments and rehabilitation specifications, the BAER Team initiated repair of fence cuts and posted several interior ALE Reserve roads as closed because of the powdery soils.

This plan was submitted to USFWS and DOE in accordance with interagency BAER guidelines, within 10 days of fire control.

Other resource impacts assessed as a result of the 24 Command Fire included a review of cultural sites impacted, impacts to Federally listed Threatened and Endangered species, and vegetation resources. The cultural resource assessment addressed a minimum of 190 previously recorded historic and prehistoric archeological sites, including lithic scatters to can scatters, Indian hunting sites to ranch buildings, spirit quest monuments to gas production wells. Prior to rehabilitation of the suppression lines an archeological inventory was conducted. A cultural resource damage assessment of the burn area still needs to be completed as quickly as possible.

Section 7 Consultation was initiated for Federally listed Threatened and Endangered species. There were no Federally listed wildlife species within the burn area and those T&E species listed as occurring or having habitat within Benton County did not have habitat within or adjacent to the burn area. There were a number of state listed species that were addressed as well as some species identified as being of Tribal importance. Consultation is concluded for the rehabilitation actions identified in this plan.

There was one Federally listed Threatened plant species and eight previously inventoried state listed species known to occur within the fire area. Vegetation resources provide valuable wildlife forage and habitat, watershed protection, and comprise a visually pleasing landscape. The effects of the 24 Command Fire will have both positive and negative short and long-term influences on these plant communities and in the natural regeneration processes of the impacted watersheds. Generally speaking, most sagebrush and bunchgrass communities experienced greater than 75% vegetative loss. On approximately 85% of the fire area, complete consumption of vegetative resources was observed. Most shrub, grass and forb species and organic material on the soil surface was consumed indicating extreme fire intensity. Due to the fact that the fire moved so quickly with a low burn severity, seed bank sources in the soil were not adversely impacted. The primary vegetative concerns are the recovery of the shrub-steppe plant community and control of non-native weed invasion.

It is intended that the Implementation Leader for USFWS will initiate BAER emergency fire rehabilitation treatments across jurisdictional lines to ensure critical habitat recovery of the shrub-steppe plant community. This will take coordination and possibly another Memorandum of Understanding.

This BAER Plan is the initial funding request for Emergency Fire Rehabilitation funds. This plan may also be used as a justification to seek funding from other sources. Additional supplemental requests may be made after this document has been reviewed and approved by Regional/National BAER Coordinators or approval authorities of the Department of Energy.

The Emergency Fire Rehabilitation funding for this plan extends over three years from the date of plan approval. At the conclusion of the funding period, a final Accomplishment Report will be due to the approval authority. The Accomplishment Report will document the funding received, (initial and supplemental funding), treatments installed, the effectiveness of the installed treatments and the results of monitoring activities. A template for this report is provided with this BAER Plan to USFWS.